

**Flood Control Project Maintenance
Levee Inspections**

Fall 2016 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0008	Overall LMA Rating	Total LMA Miles						
Sacramento Maintenance Yard	A	3.52						
Sacramento Bypass								
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.02		0.02	0.57%				
Animal Control	0.02		0.02	0.57%				
Slope Stability	0.01		0.01	0.28%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.02			
<i>LMA Totals:</i>	0.05	0.00	0.05	1.42%	0.02	0.00	0.00	0.00
Unit No. 01 Sacramento Bypass or North Levee RB	Overall Unit Rating	Total Unit Miles						
ST0008	A	1.74						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.01		0.01	0.58%				
Animal Control	0.01		0.01	0.58%				
Slope Stability	0.01		0.01	0.58%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.02			
<i>Unit Totals:</i>	0.03	0.00	0.03	1.73%	0.02	0.00	0.00	0.00
Unit No. 02 Sacramento Bypass or South Levee LB	Overall Unit Rating	Total Unit Miles						
ST0008	A	1.79						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.01		0.01	0.56%				
Animal Control	0.01		0.01	0.56%				
<i>Unit Totals:</i>	0.02	0.00	0.02	1.12%	0.00	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2016 Levee Inspection Results

Sacramento Maintenance Yard Sacramento Bypass

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Sacramento Maintenance Yard Sacramento Bypass

Waterway			Bank	Unit Miles
Unit No. 01 Sacramento Bypass or North Levee			Right	1.74
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/2/2016 - 3/2/2016		10/13/2016 - 10/13/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By	Casey Lund		Casey Lund	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	10/13/2016 10/13/2016	Oleg Yakimov

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_ST0008_01_s _ 2013_3				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_ST0008_01_s _ 2013_4				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard maintains a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_ST0008_01_s _ 2013_5				
Comment Code					
Inspector Comment					
The Sacramento Yard has a written response plan and regular flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	10/13/2016 10/13/2016	Oleg Yakimov

LM Start	0.08	Rating **	M	Issue No.	6
LM End	0.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.606622 °	38.606622 °
				-121.561266 °	-121.561266 °
DWR ID	DWR_ST0008_01_f_2016_6				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_ST0008_284_6_20161013_00008.jpg



Slope stability issue caused by vehicles. Fall 2016.

LM Start	0.94	Rating **	M	Issue No.	10
LM End	0.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.602763 °	38.602763 °
				-121.576288 °	-121.576288 °
DWR ID	DWR_ST0008_01_f_2015_10				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : FA_2016_ST0008_284_10_20161013_00009.jpg



An updated view of the rodent holes on LS slope. Fall 2016.

LM Start	0.94	Rating **	M	Issue No.	10 (cont)
LM End	0.94	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_ST0008_284_10_20160913_00001.jpg



View of the rodent holes on the landward side of the levee looking upstream. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	10/13/2016 10/13/2016	Oleg Yakimov

LM Start	1.10	Rating **	M	Issue No.	11
LM End	1.10	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.602180 °	38.602180 °
				-121.579130 °	-121.579130 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:44783 DS_ID:19066 EP_NO: 13616 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: After more investigation depressions are from water run off. erosion repair needed FIELD_STRUCT_DESC: 1 of 2. A agriculture drainage pumping system with 24-inch and 20-inch steel discharge pipelines through the north levee of the Sacramento Bypass. The pipe is 6.33 ft below the crown and a siphon breaker on the WS. Vertical GI pipe trash rack on inlet structure. Application no. 13616, 1995 (revised). FS Date: 4/28/2015 2:43:01 PM					

Photo 1 of 2 : UCIP_FA_2016_44783_20611.jpg



Landside view: pumping plant overview

LM Start	1.10	Rating **	M	Issue No.	11 (cont)
LM End	1.10	Issue Type +	En	Location *	LS

Photo 2 of 2 : UCIP_FA_2016_44783_20609.jpg



Landside view: vertical GI pipes in inlet structure.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	10/13/2016 10/13/2016	Oleg Yakimov

LM Start	1.10	Rating **	M	Issue No.	7
LM End	1.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.602113 °	38.602113 °
				-121.579128 °	-121.579128 °
DWR ID	DWR_ST0008_01_f_2016_7				
Comment Code					
DE : Debris					
Inspector Comment					

Photo 1 of 1 : FA_2016_ST0008_284_7_20161013_00010.jpg



View of debris on WS slope of the levee. Fall 2016.

LM Start	1.10	Rating **	M	Issue No.	12
LM End	1.10	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.602128 °	38.602128 °
				-121.579150 °	-121.579150 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:44784 DS_ID:19079 EP_NO: 13616 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Horizontal Air vent on waterside slope. Green vegetation and depressions also found on waterside slope. FIELD_STRUCT_DESC: 2 of 2. A agricultural drainage pumping system with 24-inch and 20-inch steel discharge pipelines through the north levee of the Sacramento Bypass. The pipe is 6.33 ft below the crown and a siphon breaker on the WS. Vertical GI pipe trash rack on inlet structure. Application no. 13616, 1995 (revised). FS Date: 4/28/2015 2:43:26 PM					

Photo 1 of 2 : UCIP_FA_2016_44784_20619.jpg



Landside view: overview of pumping plant

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	10/13/2016 10/13/2016	Oleg Yakimov

LM Start	1.10	Rating **	M	Issue No.	12 (cont)
LM End	1.10	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.602128 °	38.602128 °
				-121.579150 °	-121.579150 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:44784					
DS_ID:19079					
EP_NO: 13616					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Horizontal Air vent on waterside slope. Green vegetation and depressions also found on waterside slope.					
FIELD_STRUCT_DESC: 2 of 2. A agricultural drainage pumping system with 24-inch and 20-inch steel discharge pipelines through the north levee of the Sacramento Bypass. The pipe is 6.33 ft below the crown and a siphon breaker on the WS. Vertical GI pipe trash rack on inlet structure. Application no. 13616, 1995 (revised).					
FS Date: 4/28/2015 2:43:26 PM					

Photo 2 of 2 : UCIP_FA_2016_44784_20618.jpg



Landside view: walkway to the pumping plant

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Sacramento Maintenance Yard Sacramento Bypass

Waterway			Bank	Unit Miles
Unit No. 02 Sacramento Bypass or South Levee			Left	1.79
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/2/2016 - 3/2/2016		10/13/2016 - 10/13/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By	Casey Lund		Casey Lund	

Summer & Winter Inspections

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Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	10/13/2016 10/13/2016	Oleg Yakimov

LM Start	0.03	Rating **	M	Issue No.	2
LM End	0.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.602613 °	38.602613 °
				-121.556021 °	-121.556021 °
DWR ID	DWR_ST0008_02_s _ 2016_2				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_ST0008_285_2_20161013_00002.jpg



View of rodent holes on LS slope of the levee near entry gate. Fall 2016..

LM Start	1.78	Rating **	M	Issue No.	5
LM End	1.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.594702 °	38.594702 °
				-121.586604 °	-121.586604 °
DWR ID	DWR_ST0008_02_s_2016_5				
Comment Code					
DE : Debris					
Inspector Comment					
This is a seasonal pile but gets burned by the LMA each year.					

Photo 1 of 2 : FA_2016_ST0008_285_5_20161013_00003.jpg



More debris was added to the pile since the time of last inspection. Fall 2016.

LM Start	1.78	Rating **	M	Issue No.	5 (cont)
LM End	1.78	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_ST0008_285_5_20160913_00001.jpg



View of the firewood on the landward side of the levee looking upstream. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	10/13/2016 10/13/2016	Oleg Yakimov

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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